997 Functional Acknowledgment

Functional Group ID=FA

Introduction:

This standard provides the format and establishes the data contents of a functional acknowledgment transaction set. The purpose of this standard is to define the control structures for a set of acknowledgments to indicate the results of the syntactical analysis of the electronically encoded documents. The encoded documents are the transaction sets, which are grouped in functional groups, used in defining transactions for business data interchange. This standard does not cover the semantic meaning of the information encoded in the transaction sets.

Heading:

	Pos. No.	Seg. ID	Name	Req. Des.	Max.Use	Loop Repeat	Notes and Comments
Must Use	010	ST	Transaction Set Header	M	1		n1
Must Use	020	AK1	Functional Group Response Header	M	1		n2
			LOOP ID - AK2			999999	
	030	AK2	Transaction Set Response Header	O	1		n3
			LOOP ID - AK3			999999	
	040	AK3	Data Segment Note	O	1		c1
	050	AK4	Data Element Note	O	99		
Must Use	060	AK5	Transaction Set Response Trailer	M	1		
Must Use	070	AK9	Functional Group Response Trailer	M	1		
Must Use	080	SE	Transaction Set Trailer	M	1		

Transaction Set Notes

1. These acknowledgments shall not be acknowledged, thereby preventing an endless cycle of acknowledgments of acknowledgments.
The Functional Group Header Segment (GS) is used to start the envelope for the Functional Acknowledgment Transaction Sets. In preparing the functional group of acknowledgments, the application sender's code and the application receiver's code, taken from the functional group being acknowledged, are exchanged; therefore, on acknowledgment functional group responds to only those functional groups from on application receiver's code to one application sender's code.
There is only one Functional Acknowledgment Transaction Set per acknowledged functional group.

2. AK1 is used to respond to the functional group header and to start the acknowledgement for a functional group. There shall be one AK1 segment for the functional group that is being acknowledged.

3. AK2 is used to start the acknowledgement of a transaction set within the received functional group. The AK2 segments shall appear in the same order as the transaction sets in the functional group that has been received and is being acknowledged.

Transaction Set Comments

1. The data segments of this standard are used to report the results of the syntatical analysis of the functional groups of transaction sets; they report the extent to which the syntax complies with the standards for transaction sets and functional groups. They do not report on the semantic meaning of the transaction sets (for example, on the ability of the receiver to comply with the request of the sender).

Segment: ST **Transaction Set Header**

Position:	010
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the start of a transaction set and to assign a control number
Syntax Notes:	
Semantic Notes:	
Comments:	1 The transaction set identifier (ST01) is intended for use by the translation routines of the interchange partners to select the appropriate transaction set definition (e.g., 810 selects the invoice transaction set).

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	ST01	143	**Transaction Set Identifier Code**	M	ID 3/3
			Code uniquely identifying a Transaction Set		
			997 X12.20 Functional Acknowledgment		
Must Use	ST02	329	**Transaction Set Control Number**	M	AN 4/9
			Identifying control number assigned by the originator for a transaction set.		

Segment: # AK1 Functional Group Response Header

Position:	020
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To start acknowledgment of a functional group
Syntax Notes:	
Semantic Notes:	
Comments:	1 AK102 is the data interchange control number found in the GS segment in the functional group being acknowledged.

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	AK101	479	**Functional Identifier Code**	M	ID 2/2
			Code identifying a group of application related transaction sets		
Must Use	AK102	28	**Group Control Number**	M	N0 1/9
			Assigned number originated and maintained by the sender		

Segment:	**AK2** Transaction Set Response Header			
Position:	030			
Loop:	AK2	Optional		
Level:	Heading			
Usage:	Optional			
Max Use:	1			
Purpose:	To start acknowledgment of a single transaction set			
Syntax Notes:				
Semantic Notes:				
Comments:	1	AK202 is the transaction set control number found in the ST segment in the transaction set being acknowledged.		

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	**AK201**	**143**	**Transaction Set Identifier Code**	M ID 3/3
			Code uniquely identifying a Transaction Set	
			Refer to 003010 Data Element Dictionary for acceptable code values.	
Must Use	**AK202**	**329**	**Transaction Set Control Number**	M AN 4/9
			Identifying control number assigned by the originator for a transaction set.	

Segment:	**AK3** Data Segment Note				
Position:	040				
Loop:	AK3	Optional			
Level:	Heading				
Usage:	Optional				
Max Use:	1				
Purpose:	To report errors in a data segment and identify the location of the data segment				
Syntax Notes:					
Semantic Notes:					
Comments:					

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	AK301	721	**Segment ID Code**	M	ID 2/3
			Code defining the segment ID of the data segment in error (See Appendix A - Number 77)		
Must Use	AK302	719	**Segment Position in Transaction Set**	M	N0 1/6
			The numerical count position of this data segment from the start of the transaction set: the transaction set header is count position 1		
	AK303	447	**Loop Identifier Code**	O	ID 1/4
			Code identifying a loop within the transaction set which is bounded by the related LS and LE segments (corresponding LS and LE segments must have the same value for loop identifier). (Note: The loop ID number given on the transaction set diagram is recommended as the value for this data element in segments LS and LE.)		
	AK304	720	**Segment Syntax Error Code**	O	ID 1/3
			Code indicating error found based on the syntax editing of a segment		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
	AK305	720	**Segment Syntax Error Code**	O	ID 1/3
			Code indicating error found based on the syntax editing of a segment		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
	AK306	720	**Segment Syntax Error Code**	O	ID 1/3
			Code indicating error found based on the syntax editing of a segment		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
	AK307	720	**Segment Syntax Error Code**	O	ID 1/3
			Code indicating error found based on the syntax editing of a segment		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
	AK308	720	**Segment Syntax Error Code**	O	ID 1/3
			Code indicating error found based on the syntax editing of a segment		
			Refer to 003010 Data Element Dictionary for acceptable code values.		

Segment: # AK4 Data Element Note

Position: 050
Loop: AK3   Optional
Level: Heading
Usage: Optional
Max Use: 99
Purpose: To report errors in a data element and identify the location of the data element
Syntax Notes:
Semantic Notes:
Comments:

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes
Must Use	AK401	722	**Element Position in Segment**	M N0 1/2

This is used to indicate the relative position of the data element in error in this data segment. The count starts with 1 for the data element immediately following the segment ID. This value is 0 for an error in the segment ID.

	Ref. Des.	Data Element	Name	Attributes
	AK402	725	**Data Element Reference Number**	O N0 1/4

Reference number used to locate the Data Element Dictionary.

	Ref. Des.	Data Element	Name	Attributes
Must Use	AK403	723	**Data Element Syntax Error Code**	M ID 1/3

Code indicating the error found after syntax edits of a data element

Refer to 003010 Data Element Dictionary for acceptable code values.

	Ref. Des.	Data Element	Name	Attributes
	AK404	724	**Copy of Bad Data Element**	O AN 1/99

This is a copy of the data element in error

Segment: **AK5** Transaction Set Response Trailer

Position:	060
Loop:	AK2 Optional
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To acknowledge acceptance or rejection and report errors in a transaction set
Syntax Notes:	
Semantic Notes:	
Comments:	

Data Element Summary

	Ref. Des.	Data Element	Name		Attributes
Must Use	AK501	717	**Transaction Set Acknowledgment Code**	**M**	**ID 1/1**
			Code indicating accept or reject condition based on the syntax editing of the transaction set		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
	AK502	718	**Transaction Set Syntax Error Code**	**O**	**ID 1/3**
			Code indicating error found based on the syntax editing of a transaction set		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
Not Used	AK503	718	**Transaction Set Syntax Error Code**	**O**	**ID 1/3**
			Code indicating error found based on the syntax editing of a transaction set		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
Not Used	AK504	718	**Transaction Set Syntax Error Code**	**O**	**ID 1/3**
			Code indicating error found based on the syntax editing of a transaction set		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
Not Used	AK505	718	**Transaction Set Syntax Error Code**	**O**	**ID 1/3**
			Code indicating error found based on the syntax editing of a transaction set		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
Not Used	AK506	718	**Transaction Set Syntax Error Code**	**O**	**ID 1/3**
			Code indicating error found based on the syntax editing of a transaction set		
			Refer to 003010 Data Element Dictionary for acceptable code values.		

Segment:		**AK9** Functional Group Response Trailer			

Position: 070
Loop:
Level: Heading
Usage: Mandatory
Max Use: 1
Purpose: To acknowledge acceptance or rejection of a functional group and report the number of included transaction sets from the original trailer, the accepted sets, and the received sets in this functional group
Syntax Notes:
Semantic Notes:
Comments: 1 If AK901 is 'A' or 'E', then the transmitted functional group is accepted. If AK901 is 'R', then the transmitted group is rejected.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	AK901	715	**Functional Group Acknowledge Code**	**M**	**ID 1/1**
			Code indicating accept or reject condition based on the syntax editing of the functional group		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
Must Use	AK902	97	**Number of Transaction Sets Included**	**M**	**N0 1/6**
			Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element		
Must Use	AK903	123	**Number of Received Transaction Sets**	**M**	**N0 1/6**
			Number of Transaction Sets received		
Must Use	AK904	2	**Number of Accepted Transaction Sets**	**M**	**N0 1/6**
			Number of accepted Transaction Sets in a Functional Group		
	AK905	716	**Functional Group Syntax Error Code**	**O**	**ID 1/3**
			Code indicating error found based on the syntax editing of the functional group header and/or trailer		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
Not Used	AK906	716	**Functional Group Syntax Error Code**	**O**	**ID 1/3**
			Code indicating error found based on the syntax editing of the functional group header and/or trailer		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
Not Used	AK907	716	**Functional Group Syntax Error Code**	**O**	**ID 1/3**
			Code indicating error found based on the syntax editing of the functional group header and/or trailer		
			Refer to 003010 Data Element Dictionary for acceptable code values.		
Not Used	AK908	716	**Functional Group Syntax Error Code**	**O**	**ID 1/3**
			Code indicating error found based on the syntax editing of the functional		

group header and/or trailer

Refer to 003010 Data Element Dictionary for acceptable code values.

Not Used   AK909   716   Functional Group Syntax Error Code   O   ID 1/3

Code indicating error found based on the syntax editing of the functional group header and/or trailer

Refer to 003010 Data Element Dictionary for acceptable code values.

Segment: **SE** **Transaction Set Trailer**

Position:	080
Loop:	
Level:	Heading
Usage:	Mandatory
Max Use:	1
Purpose:	To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments).
Syntax Notes:	
Semantic Notes:	
Comments:	**1** SE is the last segment of each transaction set.

Data Element Summary

	Ref. Des.	Data Element	Name	Attributes	
Must Use	**SE01**	**96**	**Number of Included Segments**	**M**	**N0 1/6**
			Total number of segments included in a transaction set including ST and SE segments		
Must Use	**SE02**	**329**	**Transaction Set Control Number**	**M**	**AN 4/9**
			Identifying control number assigned by the originator for a transaction set.		